

We claim:

1. A brachytherapy strand for implantation into a subject comprising seeds comprising
  - (a) a non-radionuclide imaging marker, and
  - (b) a biocompatible carrier,wherein the strand is flexible or elastic, and has a size and shape suitable for passing through the bore of a needle having an interior diameter of less than about 2.7 millimeters (10 gauge).
2. The strand of claim 1 formed of a synthetic polymer.
- 10 3. The strand of claim 1 formed of an inorganic material.
4. The strand of claim 1 formed of a natural material selected from the group consisting of proteins, peptides, polysaccharides, lipids, and combinations thereof.
5. The strand of claim 1 formed of a shape memory material.
- 15 6. The strand of claim 1 further comprising a therapeutic or diagnostic agent.
7. The strand of claim 1 further comprising conduits or pores along the length of the strand.
8. The strand of claim 7 further comprising a portal for external  
20 access using a needle or other introducer instrument for purposes of filling the conduits or pores with therapeutic or diagnostic agents after implantation.
9. The strand of claim 1 further comprising a radioactive agent.
10. The strand of claim 1 wherein the imaging marker is detectable by  
25 X-ray, fluorescence, infrared, ultrasound, magnetic detection, or MRI.
11. The strand of claim 1, wherein the size and shape is suitable for passing through the bore of a needle having an interior diameter of less than about 1.4 millimeters (15 gauge).
12. The strand of claim 1, wherein the seed is shaped into a cylinder  
30 having a diameter of between about 0.5 to 3 millimeters and a length of 4 to 500 millimeters.

13. The strand of claim 1, wherein the strand comprises seeds strung on or formed as a strand of between about 0.5 and 3 mm diameter and a length of between one and 50 cm.
14. The strand of claim 1, wherein the carrier is biodegradable.
- 5 15. The strand of claim 1 further comprising a material selected from the group consisting of ferromagnetic microspheres, oxygen, hemoglobin, synthetic hemoglobin-like substances and drugs for enhancing oxygen perfusion.
16. The strand of claim 1, further comprising a radioactive agent.
- 10 17. The strand of claim 9 further comprising a means of tracing the radioactive agent.
18. The strand of claim 1 further comprising a radiosensitizing agent.
19. The strand of claim 1 wherein the imaging marker is a radiopaque marker comprising a substance selected from the group
- 15 consisting of platinum, iridium, rhenium, gold, tantalum, bismuth, indium, tungsten, silver, and radiopaque polymers.
20. The strand of claim 1 further comprising hairs coating the external surface of the brachytherapy strand for enhancement of adhesive potential.
- 20 21. The strand of claim 1 further comprising shape memory polymeric anchoring structures or electroactive polymeric anchoring structures.
22. The strand of claim 3 wherein the inorganic material is selected from the group consisting of silicon, coral, fullerene, bioceramic, and
- 25 hydroxyapatite.
23. The strand of claim 1 wherein the seed is formed of a composite of an inorganic material and a polymer.
24. A method of making a brachytherapy strand for implantation into a subject comprising mixing a biocompatible flexible or elastic carrier
- 30 with a non-radioactive imaging agent to form seeds in a brachytherapy strand.

25. A method for administering a therapeutically active component to a target tissue in a subject, the method comprising implanting a brachytherapy strand comprising seeds comprising

(a) a non-radionuclide imaging marker, and

5 (b) a biocompatible carrier,

wherein the strand is flexible or elastic, and has a size and shape suitable for passing through the bore of a needle having an interior diameter of less than about 2.7 millimeters (10 gauge).

26. The method of claim 25, wherein the target tissue is a diseased  
10 tissue selected from the group consisting of prostate, breast and tongue.